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Class: MW 2:45 - 4:00 SHAN 2465

Course Overview:

What does it mean when biologists point to significant genetic variation across human populations? Are they offering evidence for the same racial categories which have enabled horrific and continuing violence and discrimination? Are they providing a framework for more effective medical treatments? This course will provide context for current debates by considering the intertwined development of genetics and concepts of race over the course of the 20th century. We will look at the history of early 20th century genetics and eugenics in North America and Europe, critiques of biological concepts of race following WWII, the controversy over race and IQ re-ignited by the Bell Curve, and recent developments in medicine and personal genomics that seem to be solidifying racial categories.

Goals:

By the end of this course students will be able to:

- o Place current discussions of genetics and race in their historical contexts.
- o Incorporate evidence from primary sources into a historical argument.
- o Identify and critically evaluate arguments from secondary sources.
- o Engage in independent research culminating in a formal history paper.
- Effectively lead a seminar discussion.

Course Readings:

Jonathan Kahn, *Race in a Bottle: The Story of BiDil and Racialized Medicine in a Post-Genomic Age.* (Columbia University Press 2013).

Keith Wailoo and Stephen Pemberton, *The Troubled Dream of Genetic Medicine*. (Johns Hopkins University Press 2006).

Both books are available at the Huntley Bookstore as well as through Amazon. We also have access to ebook versions through the library but you will be limited in your ability to download and/or print pages from each book.

Additional course readings will all be available as pdfs on the Sakai site. In order to participate fully in discussion, **you must bring your readings and your reading notes to class.**

This is a reading intensive class and you should set aside approximately 4 hours per week for reading.

Evaluation

Participation:

1	
In class discussion, quickwrites	
and peer review	20%
Leading seminar	10%
3 short papers	30%
Research Project:	
Annotated Bibliography + Proposal	10%
Presentation	10%
Final Paper (3500 - 3800 words)	20%

You must complete all course requirements in order to pass the course.

Class Participation

Discussion: This is a seminar class, which means that we will approach the material together through discussion. You are expected to come prepared to contribute to the conversation each week. Please see the attached rubric showing how your contribution to the discussion will be evaluated. You are not being graded on attendance but if you are not present you cannot contribute. Missing more than two class sessions will negatively affect your final grade.

Quickwrites: We will often do some short, informal writing in class. This will allow you to reflect again on the texts, generate discussion points and demonstrate your careful reading. Each quickwrite will receive a grade of 0, 1-, 1, and 1+ (for particularly wonderful responses). You may miss one quickwrite without penalty. Students who receive a 1 on each quickwrite will get a B for this portion of the grade.

Seminar Working in pairs, you will each have the opportunity to lead the discussion during one of our meetings for one hour. Please see the attached guidelines.

Short Papers: (800 – 1000 words each) Throughout the semester, you will have the opportunity to write short, argumentative papers in reaction to our course readings. **You must write one of the first two papers and three of these papers in total**. If you write more than three, we will use your best three to calculate this portion of your grade.

Papers are due on Saturdays at 9 pm: Sept. 22, Oct.6, Oct. 27, Nov. 17, Dec.1

Research Paper:(3500 – 3800 words) You will write a research paper on any topic related to the course (subject to approval). You will have a chance to share your work in a 10 minute presentation at the end of the semester.

Proposal due: November 10 at 9 pm. Presentations: December 3 and 5 Full Draft due in class December 10.

Final Paper due Monday, December 17 at 9 pm.

Schedule of Topics and Major Deadlines

September 5: Introduction

Before class: listen to Radio Lab on Race (1 hour) https://www.wnycstudios.org/story/91653-race

Extra Reading:

1. Troy Duster, *Science* (2005) "Race and Reification in Science"

September 10: Race

- 1. Michael Yudell, "A short history of the race concept," in *Race and the Genetic Revolution* (2011), 13-30.
- 2. Ian Hacking, "Why Races Still Matter," Daedalus 134 (2005): 102 116.

September 12: The Birth of Eugenics

- 1. Francis Galton, "Hereditary Talent and Character," (1865) in The Bell Curve Debate, p. 393-409
- 2. Daniel Kevles, *In the Name of Eugenics: Genetics and the Uses of Human Heredity* (1985): Chapter 2, p. 20 40.

September 17: Genetics

- 1. Evelyn Fox Keller, *The Century of the Gene*, Chapter 2 "The Meaning of Gene Function" and Chapter 3, "The Concept of a Genetic Program," p. 45 -101.
- 2. Portkin and Wilkins (2017) "The Evolving Definition of the Term 'Gene.' "Genetics **205**: 1353–1364.

September 19: Early IQ Testing (Seminar 1)

- 1. Stephen Jay Gould, *The Mismeasure of Man*, 176 222.
- 2. Lewis Terman, *The Measurement of Intelligence* (1916) https://archive.org/details/measurementofint008006mbp [take 30-45 minutes to explore the book and take notes on what you find that seems interesting / significant]

Essay #1 due Sept 22 at 9pm

September 24: American Biologists and Eugenics

- 1. Largent, M.A., "Eugenics and the Professionalization of American Biology," *Breeding contempt: the history of coerced sterilization in the United States* (2008), p. 39 63.
- 2. Davenport, Charles B. "The Effects of Race Intermingling." *Proceedings of the American Philosophical Society* 56, no. 4 (1917): 364–368.
- 3. Castle, W.E. (1924) Biological and Social Consequences Of Race-crossing. J Hered 15: 363–369.

Extra Reading:

- 1. Daniel Kevles, *In the Name of Eugenics*, Chapters 3 and 4, p. 41 69.
- 2. Philip J Pauly, Biologists and the Promise of American Life (2000), p.214 238.

3. Dorr, G.M., and Logan, A. (2011) "Quality, Not Mere Quantity, Counts": Black Eugenics and the NAACP Baby Contests. In *A Century of Eugenics in America: From the Indiana Experiment to the Human Genome Era*. Lombardo, P.A. (ed.). pp. 68–92.

September 26: Biology and Immigration (Seminar 2)

- 1. Ludmerer, K.M. (1972) Genetics, Eugenics, and the Immigration Restriction Act of 1924. *Bulletin of the History of Medicine* 46: 59–81.
- 2. Laughlin, H.H. *Biological Aspects of Immigration* (1921). (Focus on p. 8 to 18) https://archive.org/details/1921LaughlinBiologicalAspectsOfImmigration

October 1: Nazi Germany I

- 1. Robert Proctor, Racial Hygiene: Medicine Under the Nazis (1988), p.20 63.
- 2. *Handbook for Schooling the Hitler Youth* (c. 1937), especially p. 6-13. https://archive.org/details/HandbookForSchoolingTheHitlerYouth
- 3. Read the text of the 1935 Nuremberg Laws https://www.jewishvirtuallibrary.org/the-nuremberg-laws

<u>In class:</u> *The Path to Nazi Genocide* (Film) We will watch from 26:30 to the end (8 min) https://www.ushmm.org/learn/introduction-to-the-holocaust/path-to-nazi-genocide/the-path-to-nazi-genocide/full-film

October 3: Nazi Germany II (Seminar 3)

1. Stefan Kühl, *The Nazi Connection: Eugenics, American Racism, and German National Socialism* (1994), p. 37 - 63.

Essay #2 Due Oct 6th at 9pm

October 8: Post-WWII

- 1. Theodosius Dobzhansky, "The Race Concept in Biology," Scientific Monthly 52 (1941), 161-165.
- 2. UNESCO, "Statement on Race," (1950) in The Nature of Difference, p. 313 318
- 3. William C. Boyd, "Rh and the Races of Man," Scientific American 185 (1951), p. 22-25.
- 4. Frank B. Livingstone and Theodosius Dobzhansky, "On the Non-Existence of the Human Races," *Current Anthropology* 3 (1962), p. 279-281.
- 5. Bentley Glass, "The Genetic Basis of the Human Races" (1968), in *The Nature of Difference*, p.302 306.

Extra Reading

- 1. Michelle Brattain, "Race, Racism, and Antiracism: UNESCO and the Politics of Presenting Science to the Postwar Public," *American Historical Review* 112 (5): 1386 413.
- 2. Mayr, Ernst. "Typological versus Population Thinking." *Conceptual Issues in Evolutionary Biology*, 1984, 14–38.

October 10: Race and IO before The Bell Curve (Seminar 4)

1. Aaron Panofsky. "The Young Field Disrupted: The Race and IQ Controversy" p. 71 - 101 in *Misbehaving Science: controversy and the development of behavior genetics* (2014).

2. Jensen, "The Differences are Real," (1973) in *The Bell Curve Debate* p 617-629

October 15: Lewontin Responds

1. Richard Lewontin. *Human Diversity* (1982), p. 14 - 28, 88- 134.

October 17: The Bell Curve

- 1. Richard Herrenstein and Charles Murray, *The Bell Curve* (1994), p. 295-315, p. 341-368. Do a quick (20 minute) skim of Ch. 14 and Ch. 16 as well to get a sense of the argument.
- 2. Leon Kamin, "Behind the Curve," Scientific American February 1995, p. 99 103.

Extra Reading

1. Kevles, "Genetics, Race and IQ: Historical Reflections from Binet to the Bell Curve," p.3 -17.

October 22: No Class (Fall Break)

October 24: Research Workshop I

Before Class: Read one future course reading (or an extra reading) that looks interesting. Use that reading or something we have already read to generate a potential research question for your final project. Compose a Sakai post describing your question and its motivation in 3-4 sentences and upload to the Sakai Forum labelled, "October 6 Research Workshop."

Essay #3 due October 27 at 9pm

October 29: Genetic Medicine I (Seminar 5)

1. Keith Wailoo and Stephen Pemberton, "Eradicating a 'Jewish Gene': Promises and Pitfalls in the Fight against Tay-Sachs Disease," in *The troubled dream of genetic medicine* (2006), p. 14 - 60.

October 31: Genetic Medicine II

1. Keith Wailoo and Stephen Pemberton, "A Perilous Lottery for the Black Family: Sickle Cells, Social Justice and the New Therapeutic Gamble," and "Dreams amid Diversity," in *The troubled dream of genetic medicine* (2006), p. 116 - 174.

November 5: Research Workshop II

Before Class: Read sources for your research paper. Write a paragraph explaining your focused research question, its significance and the primary source(s) you intend to draw on. Compose a post for the Sakai Forum labelled, "October 29 Research Workshop II," and upload your paragraph **and a link to or copy of one primary source you hope to use.**

November 7: Race and contemporary genomics I (Seminar 6)

1. Jonathan Kahn. *Race in a Bottle: The Story of BiDil and Racialized Medicine in a Post-Genomic Age* (2012), p. 1 - 47.

Proposal and Annotated Bibliography due Nov. 10 at 9 pm

November 12: Race and contemporary genomics II

- 1. Risch, Neil, Esteban Burchard, Elad Ziv, and Hua Tang. "Categorization of Humans in Biomedical Research: Genes, Race and Disease." *Genome Biology* 3, no. 7 (2002), p. 1 -12.
- 2. Yudell, Michael, Dorothy Roberts, Rob DeSalle, and Sarah Tishkoff. "Taking Race out of Human Genetics." *Science* 351, no. 6273 (February 5, 2016): 564–65.

November 14: Ancestry I (Seminar 7)

- 1. Alondra Nelson. "Bio Science: Genetic Genealogy Testing and the Pursuit of African Ancestry." *Social Studies of Science* 38, no. 5 (October 1, 2008): 759–83.
- 2. Spend 30-45 minutes exploring African Ancestry (http://www.africanancestry.com/home/), and either AncestryDNA (https://www.ancestry.com/dna/) or 23andMe (https://www.23andme.com). Are these companies appealing to race in their advertising? If so, how? Take notes on particular language or imagery that you find significant.

Essay #4 due Nov 17 at 9pm

November 9: Ancestry II (Seminar 8)

- 1. Kim TallBear "Genomic Articulations of Indigeneity." *Social Studies of Science* 43, no. 4 (August 1, 2013): 509–33.
- 2. Indigenous People's Council on Biocolonialism: http://www.ipcb.org/issues/human genetics/htmls/geno pr.html

November 21: No Class, Thanksgiving

November 26: Race and Drug Development (Seminar 9)

1. Kahn. *Race in a Bottle*, p. 48 - 86.

November 28: Race, Genetics and Medicine Moving Forward

- 1. Kahn. *Race in a Bottle*, p. 157 192.
- 2. Braun, et. a: "Racial Categories in Medical Practice: How Useful Are They?" PLOS Medicine 4, no.
- 9 (September 25, 2007), p. 1423 1428.

Essay #5 due at Dec 1 at 9pm

December 3 and December 5

Student presentations

December 10: Peer Review

Upload a draft of your research paper to the Sakai Forum labelled "December 10 Peer Review." Please ensure that all of the information in your draft is fully cited.

December 12: Course Wrap-Up

Reading tba.

Final Paper due Monday, December 19 at 9 pm.

Seminar Guidelines (10%)

You will work with one other person to prepare to lead the seminar for 1 hour. Please prepare a Powerpoint or Keynote presentation and follow the format below.

- **A. Quick Overview.** Aim to start with a 5-10 minute presentation in which you give the class an overview of the topic and the historical context. This may include a timeline and/or a brief explanation of scientific or medical concepts being discussed. [Practice this and time yourselves so that it isn't too long!].
- **B. Discussion of reading.** Prepare an activity and a set of discussion questions that will ensure that your classmates have a chance to talk about and explore the readings. We will be grading you on how successfully you have helped your classmates **draw out and analyse the main arguments made by the author(s)** and your ability to connect the reading to the larger themes of the class. We highly recommend that you prepare a set of main points (with page #s) that you hope to draw out of the readings so that you can steer the conversation if it starts to veer off track.

<u>Due at 12pm the day of your seminar</u>: Upload a copy of the presentation through Assignments on Sakai. Make sure that your presentation includes your discussion questions and activity.